Flight Summary MACPEX 18 APR 2011

General Information

Flight date- 18 APR 2011 Flight duration – 6.0 hours

Crew – HEI/DOM

Instruments flown: 2DS, ALIAS, CPI, CIMS, CLH, DLH, FCAS, FCDP, HARWV, HVPS, JLH, MMS, NMASS, O3, O3LITE, PALMS, SID3, ULH, SP2,

VIPS

1240 Takeoff 1840 Land

Flight Log

Engine

Start 1226

Data Rec 1230 Begin 1718 Landing 1840

On Descent

Gear extension/retractions

Gear Up 1840 Gear Down 1831

Weather Observations

Ascended through broken could layer at 1,500.

Light cirrus evident near FL350 approaching PT1. Layer appeared to be above at FL320 during the SGP transit. At the SGP point we were in the base of the cloud layer. Ascended through some light cirrus haze in route to point C1 FL380.

Cloud tops appeared to be around FL375 near C1.

By 50nm from C2 in solid layer for duration of C2-C3-C2 transit. Exited between layers nearing point C1.

Broken cloud layer over EFD bottoms near 1800 feet.

Flight Profile

Transit to range was uneventful. Descended to FL350 just after PT1. Transited SGP at FL350 to PT2 30nm past SGP on PT1-SGP line.

Directed per Science to point C1 ascending to FL490 in route.

Established on line at C1 North bound at FL350 14:50.

ICE09 traveling Southbound on line co altitude extended past C2 to turn in front approximately 35nm for Northbound leg.

Returned Southbound at FL 330 15:37.

RTB at C1, ascending to FL550 in route.

MMS maneuvers accomplished at FL1,100 for Yaw and Pitch (17:59), and FL5,000 for the box at 18:20.

Instrument Notes

PALMS failed upon start. Reset 1X HARVWV fail at 14:28. Reset 1X HARVWV fail below 3,000'. No action per checklist.

Note: error message appeared at 17:45 to the effect of 'Unable to read data from transport connection. Cannot block a call from the socket if an earlier asynchronous call is in progress' on the SID3 GUI. Flag disappeared upon moving mouse. SID3 did not appear to shut down as previous when STOP SID3 toggled. "black" screen remained up. Second activation of STOP SID3 returned the error message that the program was already shut down.